UDOT Minimum Sampling and Testing Requirements

Revised April '07

Specification - Material: 02056 Embankment, Borrow and Backfill

02056 Embankment, Embankment for Bridge, Granular Borrow, and Backfill Placements

Assurance: Soil Classification

Reference: AASHTO M 145

Lot Size: Source / soil type or each 20,000 cubic yards or 30,000 tons thereafter.

Frequency per Lot: One per lot

Point of Acceptance: Grade after processing prior to compaction

Sampling Reference: AASHTO T 2

Report/Form: Weekly Form 348

02056 Free Draining Granular Backfill

Assurance: Sieve analysis (gradation)

Reference: AASHTO T 27 / T 11.

Lot Size: Daily Placement

Frequency per Lot: One per 500 tons or 350 cubic yards

Point of Acceptance: Grade after processing, prior to compaction

Sampling Reference: AASHTO T 2

Report/Form: Weekly Form 348

02056 Embankment, Embankment for Bridge, Granular Borrow, and Backfill Placements

Assurance: Laboratory Maximum Dry Density and Optimum Moisture for Density Standard

Reference: AASHTO T 99 Method D / AASHTO T 180 Method D for A-1 soils.

Lot Size: Source / soil type and each 20,000 cubic yards or 30,000 tons thereafter.

Frequency per Lot: One per 20,000 cubic yards or 30,000 tons for each layer.

Point of Acceptance: Grade after processing, prior to compaction

Sampling Reference: AASHTO T 2

Report/Form: Weekly Form 348

Specification - Material: 02056 Embankment, Borrow and Backfill

02056 Embankment, Granular Borrow, and Subgrade Placements

Assurance: In-place density

Reference: AASHTO T 310

Lot Size: A lot equals material placed to line and grade and compacted in one production day

Frequency per Lot: A lot is divided into equal sublots not to exceed 5000 square yards per lift, 15,000 square

yards in cut sections. A minimum of one randomly located determination per sublot

Point of Acceptance: Grade after Compaction

Sampling Reference: MOI 8-984

Report/Form: Weekly Form 348

02056 Embankment for Bridge

Assurance: In-place density

Reference: AASHTO T 310

Lot Size: One foot lift

Frequency per Lot: Six randomly located determinations per one foot lift. Two of the six determinations must

be within two feet of the outside perimeter.

Point of Acceptance: Grade after Compaction
Sampling Reference: MOI 8-981 / MOI 8-984

Report/Form: Weekly Form 348

02056 Backfill Placements

Assurance: In-place density

Reference: AASHTO T 310

Lot Size: A lot equals 1000 square yards or less and not more than one pipe culvert or small

structure.

Frequency per Lot: Four randomly located determinations per lot, minimum one determination per lift.

Placements less than 10 cubic yards or 15 tons, test as directed by the engineer.

Point of Acceptance: Grade after Compaction

Sampling Reference: MOI 8-984

Report/Form: Weekly Form 348

Specification - Material: 02056 Embankment, Borrow and Backfill

Assurance: Compaction - Material that is too rocky to apply the correction for coarse particles: 30%

cumulatively retained on the 3/4" sieve

Reference: AASHTO T 224

Lot Size:

Frequency per Lot: Compaction is visually inspected. Document method and equipment used for placement,

appearance of gradation uniformity, moisture content, compactive effort, and final

appearance.

Point of Acceptance: Grade

Sampling Reference:

Report/Form: Weekly Form 348

Assurance: Visual Acceptance of very small quantities of materials

Reference: Acceptance is limited to material being furnished from sources found satisfactory under

normal sampling and testing procedures.

Lot Size: Not to exceed 200 cubic yards or 300 tons per day or 1000 cubic yards or 1500 tons per

roject

Frequency per Lot: One report for each day material is accepted

Point of Acceptance: Grade

Sampling Reference:

Report/Form: Visual Inspection Report